

***The Institution of Engineers, Australia: Sydney Division  
Engineering Heritage Committee***

***Oral History Program: Biographical Notes***

**Hugo Karl MESSERLE (1925 - )**  
**Electrical Engineer**

**Birth & Family:** Born 25<sup>th</sup> October 1925 in a German colony in Haifa Palestine. Youngest child of Anna Blaich and Theophil Messerle. Elder sister died the day before his birth.

Married to Renate Ursula Meyer (nurse) in 1954. He has two children

**Education:** Attended primary school (1932-39) at a Christian Community school. In 1939, after the start of the war, British Authorities interned him. Later in 1942 was transferred to Australia for internment in camps in Victoria and South Australia for the remainder of the war. In 1945, through the German Red Cross, he passed the German Abitur, the equivalent of the Higher School Certificate. He did advanced studies at university level through the University of Graz in Austria, also via the German Red Cross. In 1946 the University of Melbourne accepted his enrolment in engineering and credited his previous studies. He graduated from University of Melbourne in 1950 with a degree in Electrical Engineering with 1<sup>st</sup> class honours. He followed this in 1952 with the Master in Engineering Science degree with 1<sup>st</sup> class honours, also from University of Melbourne. Between 1955 and 1958, while lecturing at Sydney University, he gained his Doctor of Philosophy degree.

**Qualifications:** PhD, DSc, FTSE, FIEAust, FIEE, FIEEE, FAIP

**Memberships:**

- 1963 Foundation member of The International Liaison Group on MHD Electrical Power Generation (ILG-MHD). As a member, he was involved in the annual Meetings and triennial International Conferences (1964-93)
- 1964 Founder of the Electrical Engineering Foundation
- 1972 Invited to join Current Zero Club
- 1975 Member of the Executive of the College of Electrical Engineers
- 1975 Foundation Chairman of National Committee on Electrical Power Engineering
- 1976-78 Member of Task Force on Energy and Chairman of Panel on Alternatives
- 1984 Elected Chairman of ILG-MHD
- 1985-89 Elected as Director to the Board of Seam Inc. USA
- 1989 Re-elected as Chairman of ILG-MHD
- 1989-92 Elected foundation Chairman of International Liaison Group on Engineering Education
- 1990 Invited to join Council of the International Association of Continuing Engineering Education representing IEAust

	1991	Member of Education Committee of Australian Academy of Technological Sciences and Engineering (ATSE)
	1993	Appointed Chairman of the Sustainable Development Committee of ATSE
<b>Awards:</b>	1950	The Dixon Scholarship, ( <i>what is this and was is it for?</i> )
	1951	Argus Research Scholarship ( <i>what is this and was is it for?</i> )
	1952	Electrical Engineering Premium of the IEAust for thesis on "Electronic Simulation of Hydraulic Problems"
	1958	Fullbright Scholarship, used to spend a year at Cornell University in New York.
	1961	Electrical Engineering Prize of the IEAust for PhD thesis on "Dynamic Stability of Synchronous Generators"
	1984	Centennial Medal of the Institution of Electrical and Electronic Engineers (IEEE) of USA
	1993	Awarded 1994 Medal of the Australasian Association of Engineering Education for distinguished Contribution to Engineering Education.

### Work History:

After being naturalized in 1952 Hugo Messerle accepted a Lectureship with the University of Sydney, presenting an honours course on Matrices and Tensors and running the electro-mechanical differential analyser laboratory. In 1957, was promoted to a Senior Lectureship.

In 1964, he was invited to be a visiting Professor at the Cornell University and guest lectured at many universities and industrial research laboratories around the US.

Published his first textbook, "Dynamic Circuit Theory", in 1965.

He spent two years visiting US universities. On returning to Australia he was promoted to a Readership in Electrical Engineering where he established a new teaching lab and research program in MHD (magnetohydrodynamic) electrical power generation. With a three-year grant from the Electricity Commission of NSW, Messerie and his team built an experimental MHD generator facility in the White Bay Power Station.

Appointed to the second chair of Electrical Engineering at the University of Sydney in 1965, Messerle set up major Synthetic Power Testing and plasma technology facilities for Sydney University's Electrical Engineering Department. He was appointed Head of the School of Electrical Engineering in 1969.

In 1971, Messerle spent a year at the University of Stuttgart, West Germany and the following year at the Institute for Plasma Research.

He organised and chaired the "Second World Conference in Education" in Sydney in 1989, and established the International Liaison Group on Engineering Education.

Appointed Emeritus Professor after his retirement from Sydney University in 1991, Messerle retained an active interest in engineering education and the social and cultural aspects of engineering, including helping establish the Committee on Sustainable development.

An active member of the Presbyterian Church, he also took an active interest in the continuing education of ministers.

